

closed. **FIG. 2C** shows a third folder opening/closing state in which the first folder housing **200-1** is closed and the second folder housing **200-2** is opened. **FIG. 2D** shows a fourth folder opening/closing state in which both the first folder housing **200-1** and the second folder housing **200-2** are opened.

[0046] In the first folder opening/closing state shown in **FIG. 2A**, if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the first folder housing, detects the magnet included in the first folder housing, and if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the second folder housing, detects the magnet (not shown) included in the second folder housing, the folder opening/closing detection module **180** generates a first folder opening/closing detection signal.

[0047] In the second folder opening/closing state shown in **FIG. 2B**, if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the second folder housing, detects the magnet (not shown) disposed in the second folder housing, the folder opening/closing detection module **180** generates a second folder opening/closing detection signal.

[0048] In the third folder opening/closing state shown in **FIG. 2C**, if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the first folder housing, detects the magnet (not shown) included in the first folder housing, the folder opening/closing detection module **180** generates a third folder opening/closing detection signal.

[0049] In the fourth folder opening/closing state shown in **FIG. 2D**, if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the first folder housing, does not detect the magnet included in the first folder housing, and if the sensor (not shown) disposed in the body housing of the wireless terminal, which makes contact with the second folder housing, does not detect the magnet (not shown) disposed in the second folder housing, the folder opening/closing detection module **180** generates a fourth folder opening/closing detection signal.

[0050] The position detection module **190** detects a position of the wireless terminal and outputs a position detection signal to the control module **110**. Specifically, the position detection module **190** detects position detection signals according to positions of the wireless terminal so as to output the position detection signals to the control module **110**. Herein, according to an embodiment of the present invention, it is assumed that the position detection module **190** is a two-axis acceleration sensor capable of detecting an X axis and a Y axis.

[0051] Hereinafter, two position detection signals detected by the position detection module **190** will be described with reference to **FIGS. 4A to 7B**. **FIGS. 4A and 4B** are views illustrating an operation of the wireless terminal according to the position detection signals in the first folder opening/closing state. **FIG. 4A** shows a first position state in the first folder opening/closing state of the wireless terminal, and **FIG. 4B** shows a second position state in the first folder opening/closing state. Herein, the first position state refers to a state in which the wireless terminal stands upright, and the second position state refers to a state in which the wireless

terminal has been rotated 180° from the first position state. **FIGS. 5A and 5B** are views illustrating an operation of the wireless terminal according to the position detection signals in the second folder opening/closing state. **FIG. 5A** shows the first position state in the second folder opening/closing state of the wireless terminal, and **FIG. 5B** shows the second position state in the second folder opening/closing state. **FIGS. 6A and 6B** are views illustrating an operation of the wireless terminal according to the position detection signals in the third folder opening/closing state. **FIG. 6A** shows the first position state in the third folder opening/closing state of the wireless terminal, and **FIG. 6B** shows the second position state in the third folder opening/closing state. **FIGS. 7A and 7B** are views illustrating an operation of the wireless terminal according to the position detection signals in the fourth folder opening/closing state. **FIG. 7A** shows the first position state in the fourth folder opening/closing state of the wireless terminal, and **FIG. 7B** shows the second position state in the fourth folder opening/closing state.

[0052] If the wireless terminal is in an upright position as shown in **FIGS. 4A, 5A, 6A, and 7A**, the position detection module **190** generates the first position detection signal.

[0053] In addition, if the wireless terminal has been rotated 180° as shown in **FIGS. 4B, 5B, 6B, and 7B**, the position detection module **190** generates the second position detection signal.

[0054] **FIG. 3** is a flowchart illustrating a method for controlling functions of the display module and the key input modules in the wireless terminal according to an embodiment of the present invention. Specifically, a method for controlling the functions of the display module **160** and the key input module **170** in the wireless terminal including the folder opening/closing detection module **180** shown in **FIGS. 2A to 2D** will be described below with reference to **FIG. 3**. According to an embodiment of the present invention, it is assumed that the inner keys and the external keys of the first key input module **171** are realized as alphanumeric keys for inputting numeral information and letter information. In addition, it is assumed that the inner keys and the external keys of the second key input module **172** are realized as function keys for setting various functions.

[0055] Referring to **FIG. 3**, the control module **110** determines whether or not the current mode is a display mode in step **301**. Herein, the display mode refers to a mode in which an image is displayed on the first display module **161** due to contact of the body housing and the folder housings in the wireless terminal. In addition, the display mode refers to a mode in which an image is displayed on the second display module **162** due to separation between the body housing and the folder housings in the wireless terminal. If an automatic display change mode is set in the display mode described above, the control module **110** detects the automatic display change mode in step **302**. Herein, the automatic display change mode refers to a mode in which the functions of the display module **160** and the key input module **170** are controlled according to the folder opening/closing detection signals of the folder opening/closing detection module **180**. Accordingly, if the automatic display change mode is not set, the control module **110** allows the display module **160** and the key input module **170** to perform their general functions regardless of an output of the folder opening/closing detection module **180**. However, if the automatic display change